

AMENDMENTS TO THE CLAIMS:

Applicant respectfully requests that this listing of claims replace the prior versions of claims in the application.

1. (Previously presented) A method, comprising:

allocating a tunneling IP address for a tunnel to be formed for data transmission of a terminal connected to a first access device, to a corresponding host, to which tunneling IP address the tunnel is bound, and

transferring at least the tunneling IP address from the first access device to a second access device in response to detecting a need to change the connection of the terminal to be carried out by the second access device.

2. (Original) A method as claimed in claim 1, wherein tunnelling attributes, at least an IP address of the corresponding host and the tunnelling IP address allocated to the terminal in the first access device, are determined in an authentication server as a part of the authentication of the terminal before arranging the tunnel to the corresponding host,

the tunnelling attributes are transferred to the first access device in response to a successful authentication,

the IP address used in the data transmission of the terminal and the tunnelling IP address for the tunnel to be formed for the data transmission of the terminal that is used as an end point of the tunnel transferring data of the terminal are allocated in the first access device to the terminal,

the tunnel determined by the tunnelling attributes is bound in the first access device to the tunnelling IP address,

the tunnel, whose end points include the tunnelling IP address and the IP address of the corresponding host, is formed and thereafter the data transmission to the tunnelling IP address is transferred to a network interface of the first access device.

3-5. (Canceled)

6. (Currently amended) A method as claimed in claim 1, wherein the system supports an [[IPv6]]IP version 6 protocol, whereby the information concerning a new binding is sent to at least one network node connected to the first access device and to the second access device to the routing table thereof using a ~~Neighbour Discovery~~neighbour discovery protocol.

7. (Currently amended) A method as claimed in claim 1, wherein the system supports an [[IPv4]]IP version 4 protocol, whereby the information concerning a new binding is sent to at least one network node connected to the first access device and to the second access device to an [[ARP]]address resolution protocol table (~~Address Resolution Protocol~~) thereof using an [[ARP]]address resolution protocol.

8. (Original) A method as claimed in claim 1, wherein the first access device and the second access device are access points of a wireless local network connected to one another through a wired local network.

9-12. (Canceled)

13. (Currently amended) An ~~access device for a telecommunication network, wherein the access device is~~apparatus comprising a memory and a processor configured to provide a terminal with a connection;

~~the access device is configured to allocate a tunnelling IP address for a tunnel to be formed for [[the ]]data transmission of [[the]]a terminal, to which tunnelling IP address the tunnel is bound,~~

~~the access device is configured to form the tunnel between a corresponding host and an access device~~the apparatus for data transmission of the terminal, and

~~the access device is configured to send at least said tunnelling IP address to a second~~an access device in response to detecting a need to change [[the]]a connection

provided for the terminal by the apparatus to be implemented by the ~~second~~-access device.

14. (Currently amended) An ~~access device~~apparatus as claimed in claim 13, wherein said binding refers to the binding between a [[MAC]]medium access control address of the network interface and the tunnelling IP address.

15. (Currently amended) An ~~access device~~apparatus as claimed in claim 13, wherein the ~~access device~~apparatus is configured to change the binding of the tunnelling IP address to temporarily denote the network interface of the ~~second~~-access device.

16. (Currently amended) An access device for a telecommunication network comprising means for providing a terminal with a connection and means for forming a tunnel between a corresponding host and the access device for data transmission of the terminal, wherein the access device is configured to receive from a second access device at least a tunnelling IP address allocated for a tunnel for the data transmission of the terminal in response to detecting a need to change [[the]]a connection of the terminal provided by the second access device to be implemented by the access device,

the access device is configured to form a binding between the tunnelling IP address and [[the]]a network interface of the access device, and

the access device is configured to update the information concerning the new binding between the network interface and the tunnelling IP address to at least one network node included in the system.

17. (Original) An access device as claimed in claim 16, wherein the access device is configured to transfer data after updating between the terminal and the corresponding host using the binding formed.

18. (Currently amended) An access device as claimed in claim 16, wherein said binding refers to the binding between a ~~[[MAC]]~~medium access control address of the network interface and the tunnelling IP address, whereby

the access device is configured to send the information concerning said binding using an ~~[[ARP]]~~address resolution protocol or a ~~Neighbour Discovery~~neighbour discovery protocol.

19. (Currently amended) A communications apparatus comprising a ~~processor and memory and a processor, wherein the apparatus is~~ configured to:

form a tunnel between a corresponding host and the apparatus for data transmission of a terminal,

~~the apparatus is configured to receive~~ from an access device at least a tunnelling IP address allocated for a tunnel for the data transmission of the terminal in response to detecting a need to change ~~[[the]]~~a connection of the terminal provided by the access device to be implemented by the apparatus,

~~the apparatus is configured to form a binding between the tunnelling IP address and~~ [[the]]a network interface of the apparatus, and

~~the apparatus is configured to update the information concerning the new binding between the network interface and the tunnelling IP address to at least one network node included in the system.~~

20. (Previously presented) An apparatus as claimed in claim 19, wherein the apparatus is configured to transfer data after updating between the terminal and the corresponding host using the binding formed.

21. (Currently amended) An apparatus as claimed in claim 19, wherein said binding refers to the binding between a ~~[[MAC]]~~medium access control address of the network interface and the tunnelling IP address, whereby

the apparatus is configured to send the information concerning said binding using an ~~[[ARP]]~~address resolution protocol or a ~~Neighbour Discovery~~neighbour discovery protocol.

22. (Currently amended) An apparatus as claimed in claim 19, wherein the apparatus is configured to support an ~~[[IPv6]]~~IP version 6 protocol, and the apparatus is configured to send the information concerning the new binding to at least one network node by using a ~~Neighbour Discovery~~neighbour discovery protocol.

23. (Currently amended) An apparatus as claimed in claim 19, wherein the apparatus is configured to support an ~~[[IPv4]]~~IP version 4 protocol, and the apparatus is configured to send the information concerning the new binding to at least one network node to an ~~[[ARP]]~~address resolution protocol table (~~Address Resolution Protocol~~) thereof by using an ~~[[ARP]]~~address resolution protocol.

24. (Previously presented) An apparatus as claimed in claim 19, wherein the apparatus is an access point of a wireless local network connected to another access point through a wired local network.

25. (Previously presented) An apparatus as claimed in claim 19, wherein the network node is a router in a local network.

26. (Currently amended) A method comprising:

receiving from a first access device at least a tunnelling IP address allocated for a tunnel for data transmission of a terminal in response to detecting a need to change ~~[[the]]~~a connection of the terminal provided by the first access device to be implemented by a second access device,

forming a binding between the tunnelling IP address and a network interface of the second access device, and

updating the information concerning the new binding between the network interface and the tunnelling IP address to at least one network node included in the system of the terminal.

27. (Previously presented) A method as claimed in claim 26, the method further comprising:

transferring data between the terminal and the corresponding host using the binding configured to the second access device after updating.

28. (Previously presented) A method as claimed in claim 26, wherein the network node is a router in a local network.

29. (Currently amended) A method as claimed in claim 26, wherein said binding refers to binding between a ~~[[MAC]]~~medium access control address of the network interface and the tunnelling IP address.

30. (Currently amended) A method as claimed in claim 26, wherein the system supports an ~~[[IPv6]]~~IP version 6 protocol, whereby the information concerning the new binding is sent to at least one network node connected to the first access device and to the second access device to the routing table thereof using a ~~Neighbour Discovery~~neighbour discovery protocol.

31. (Currently amended) A method as claimed in claim 26, wherein the system supports an ~~[[IPv4]]~~IP version 4 protocol, whereby the information concerning the new binding is sent to at least one network node connected to the first access device and to the second access device to an ~~[[ARP]]~~address resolution protocol table (~~Address Resolution Protocol~~) thereof using an ~~[[ARP]]~~address resolution protocol.

32. (Previously presented) A method as claimed in claim 26, wherein the first access device and the second access device are access points of a wireless local network connected to one another through a wired local network.